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## **Introduction:**

For younger men (<65 years of age) with high risk locally advanced (>stage 2C), active treatment with surgery or radiotherapy appears to improve disease-free and overall survival as compared to active surveillance (no active treatment). Minority men are less likely to receive active treatment but the reasons for this haven't been evaluated in younger men. Since black men with prostate cancer are younger at diagnosis, more likely to have poorly differentiated tumors, less likely to receive active treatment and more likely than white men to die of prostate cancer, it is possible that the quality of prostate cancer care delivered may be contributing to the racial disparity in mortality. While it is clear that physician recommendation and physician specialty affects the type of prostate cancer treatment recommended and ultimately received, little is known about racial differences in which treatments are offered to minority vs nonminority men and why. Nor are there data explaining younger minority men's lower rates of active treatment in circumstances when active surveillance does not achieve the same benefits of active treatment. This proposal seeks to determine whether the quality of care received by minority men with locally advanced prostate cancer differs from the care received by white men controlling for comorbidity, age and insurance. We will look at reasons for the treatment choices minority men make including their experiences, their physicians' recommendations, beliefs about the prostate cancer, its treatment and consequences and assess racial differences in beliefs and potential causes of poorer quality care; and, explore urologists perceptions of their decision-making and referrals among men who do not receive active treatment (surgery, EBRT or brachytherapy), and those receiving poor quality of care.

## **Body:**

During this second year of funding of the "Racial Disparities in the Quality of Prostate Cancer Care" project, we have accomplished several important milestones. The goals of this second year as per our statement of work are: 1) abstracting medical records; 2) developing the focus group guide; 3) data entry and analysis of chart abstraction data; 4) designing the physician interview; and 2-5) recruitment, conduct and analysis of focus groups.

We worked with both Pathology and the Data Warehouse to identify white, and black men with a Gleason score  $\geq 7$ . Pathology does not routinely collect and report race and not all prostate cancer patients are identified in the Data Warehouse. After merging the 2 data sources, there were 1991 patients with Gleason 7-10 of whom 1306 were white and 350 were black. Based on prior tumor registry data, we had anticipated a higher number of black men (~100/yr) and planned to abstract 870 cases. Given the realities of the sample, we revisited the power calculations: assuming an underuse rate of 6% in blacks and 1.2% in whites (as per SEER Medicare - Shavers, et al, 2004), we determined that using all 350 black and 350 white men would give 80% power to detect a racial difference in treatment. Of course, this assumes the underuse rate is similar in younger populations as to Medicare populations; thus we still aim to abstract 870 cases to ensure power to identify a racial difference in quality of cancer care. The 350 white men were randomly selected from groups matched by Gleason score and age to the black men. To date, we have abstracted a total of 623 medical charts of men diagnosed with prostate cancer with a Gleason sum of 7-10. We have entered the data into our database and are analyzing to assess quality of care, a prerequisite to identify focus group participants. We are in the process of collecting RT and ADT information as these are located in paper-charts outside the EMR system. As some men get their post-surgical or RT care outside of Mount Sinai Hospital, we are reaching out to numerous office practices to obtain missing treatment information. We are finishing up with the data abstraction of the remaining 77 charts to complete our Mount Sinai sample. We are in the process of completing the IRB paperwork for Harlem Hospital Center to abstract the remaining 170 records at that site, a critical piece as Harlem Hospital serves a poorer patient population and will broaden generalizability.

Of the 623 abstracted charts, 539 are eligible for inclusion: 34 have prior h/o cancer; 30 have metastatic cancer; 20 are missing pathological staging and have PSA <10. We will continue abstracting until we have 700 eligible cases in our Mount Sinai sample and 170 in the Harlem sample.

Based on our literature review and expert Steering Committee review, we identified the critical fields that indicate quality of care in our data abstraction tool. Our preliminary results show that 90% of our population consists of intermediate risk cancers (Gleason 7). 30% of black men have more than 1 comorbid condition as compared to 9% of whites. Below is a table with a breakdown of the treatments received by men in the sample. Of note, 85% of the no treatment group are men with intermediate cancers.

<b>Treatment</b>	<b>Total (N=539)</b>	<b>Black (N=287)</b>	<b>White (N=252)</b>	<b>p-value</b>
Radical prostatectomy	424 (79%)	72%	87%	<.0001
RP + RT	11 (2%)	2%	2%	NS
RP + ADT	9 (2%)	2%	1%	NS
EBRT alone	5 (1%)	1%	0%	NS
EBRT + ADT	4 (1%)	1%	0%	NS
ADT alone	6 (1%)	2%	0%	0.02
Brachytherapy	47 (9%)	13%	4%	0.0002
No treatment	33 (6%)	7%	6%	NS

Drs. McAlearney and Lin, have developed the Focus Group Moderator Guide as well as physician interview. These focus groups will be conducted among men with and without active treatment to explore beliefs about prostate cancer, its treatment, physician recommendation and medical mistrust. The physician interview guide will serve to explore reasons for treatments given to specific patients. We are now identifying the focus group study sample.

We have been meeting with members of the Data Warehouse (clinical research data repository for the institution) and members of the IT in the Department of Pathology in order to identify the sample of patients whose charts will be reviewed. Our data request to identify the study sample is in process and we expect to receive the list soon. To increase our sample of Black patients treated at a different facility, we are planning on partnering with Dr. Gerald Hoke of the Harlem Hospital Center.

#### **Key Research Accomplishments:**

- Completed chart abstraction tool
- Completed Mount Sinai patient sample identification for chart abstraction
- Completed 62% of the medical chart abstraction
- Began data analysis of quality indicators
- Developed Focus Group Moderator Guide
- Developed Physician Interview

#### **Reportable Outcomes:**

None at this time.

#### **Conclusion:**

We have completed the majority of the chart abstraction and have found that a little over 80% of patients have surgery to treat prostate cancer but a small number go on to receive RT or ADT.

#### **References:**

None.

#### **Supporting Data:**

None.